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H5
10-30-01
P.2

PCT09

RAW SEQUENCE LISTING

DATE: 03/07/2001

PATENT APPLICATION: US/09/763,836

TIME: 13:11:12

Input Set : A:\37156SEQ.txt

Output Set: N:\CRF3\03072001\I763836.raw

ENTERED

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3 <110> APPLICANT: YAMADA, Osamu
4 YOSHIDA, Hiroshi
5 ZHANG, Jing
7 <120> TITLE OF INVENTION: Nucleic Acid Sequence which Enhances Gene Expression and Method of
8 Enhancing Gene Expression
10 <130> FILE REFERENCE: 19036/37156
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/763,836
C--> 12 <141> CURRENT FILING DATE: 2001-02-27
12 <160> NUMBER OF SEQ ID NOS: 11
14 <210> SEQ ID NO: 1
15 <211> LENGTH: 713
16 <212> TYPE: DNA
17 <213> ORGANISM: Hepatitis Type C Virus (HCV)
19 <220> FEATURE:
20 <221> NAME/KEY: 5'UTR
21 <222> LOCATION: (1)..(341)
23 <220> FEATURE:
24 <221> NAME/KEY: CDS
25 <222> LOCATION: (342)..(713)
27 <400> SEQUENCE: 1
28 gccagccccc tgatgggggc gacactccac catagatcac tcccctgtga ggaactactg 60
29 tcttcacgca gaaagcytct agccatggcg ttagtatgag tgcgtgcag cctccaggac 120
30 ccccccctcc gggagagcca tagtgggtctg cggaaccggt gagtacaccg gaattgccag 180
31 gacgaccggg tcctttcttg gatcaacccg ctcaatgcct ggagatttgg gcgtgcccc 240
32 gcgagactgc tagccgagta gtgttgggtc gcgaaaggcc ttgtggtagt gcctgatagg 300
33 gtgcttgcca gtgccccggg aggtctogta gaccgtgcac c atg agc aca aat cct 356
34 Met Ser Thr Asn Pro
35 1 5
36 aaa cct caa aga aaa acc aaa cgt aac acc aac cgc cgc cca cag gac 404
37 Lys Pro Gln Arg Lys Thr Lys Arg Asn Thr Asn Arg Arg Pro Gln Asp
38 10 15 20
39 gtc aag ttc ccg ggc ggt ggt cag atc gtt ggt gga gtt tac ctg ttg 452
40 Val Lys Phe Pro Gly Gly Gly Gln Ile Val Gly Gly Val Tyr Leu Leu
41 25 30 35
42 ccg cgc agg ggc ccc agg ttg ggt gtg cgc gcg act agg aag act tcc 500
43 Pro Arg Arg Gly Pro Arg Leu Gly Val Arg Ala Thr Arg Lys Thr Ser
44 40 45 50
45 gag cgg tcg caa cct cgt gga agg cga caa cct atc ccc aag gct cgc 548
46 Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro Ile Pro Lys, Ala Arg
47 55 60 65
48 cgg ccc gag ggc agg acc tgg gct cag ccc ggg tat cct tgg ccc etc 596
49 Arg Pro Glu Gly Arg Thr Trp Ala Gln Pro Gly Tyr Pro Trp Pro Leu
50 70 75 80 85
51 tat ggc aac gag ggc atg ggg tgg gca gga tgg etc ctg tcg ccc cgc 644
52 Tyr Gly Asn Glu Gly Met Gly Trp Ala Gly Trp Leu Leu Ser Pro Arg
53 90 95 100
54 ggc tcc cgg cct agt tgg ggc cct tcg gac ccc cgg cgt agg tcg cgt 692

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55 Gly Ser Arg Pro Ser Trp Gly Pro Ser Asp Pro Arg Arg Arg Ser Arg
56          105          110          115
57 aat ttg ggt aag gtc atc gat                                713
58 Asn Leu Gly Lys Val Ile Asp
59          120
61 <210> SEQ ID NO: 2
62 <211> LENGTH: 31
63 <212> TYPE: DNA
64 <213> ORGANISM: Hepatitis Type C Virus (HCV)
66 <220> FEATURE:
67 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Primer for Amplifying Fragments of HCV
68      cDNA
70 <400> SEQUENCE: 2
71 cccaagcttg ccagcccccct gatgggggag a                                31
73 <210> SEQ ID NO: 3
74 <211> LENGTH: 31
75 <212> TYPE: DNA
76 <213> ORGANISM: Hepatitis Type C Virus (HCV)
78 <220> FEATURE:
79 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Primer for Amplifying Fragments of HCV
80      cDNA
82 <400> SEQUENCE: 3
83 cccaagcttc tggcaattcc ggtgtactca c                                31
85 <210> SEQ ID NO: 4
86 <211> LENGTH: 29
87 <212> TYPE: DNA
88 <213> ORGANISM: Hepatitis Type C Virus (HCV)
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Primer for Amplifying Fragments of HCV
92      cDNA
94 <400> SEQUENCE: 4
95 cccaagcttg acgaccgggt cttttcttg                                29
97 <210> SEQ ID NO: 5
98 <211> LENGTH: 30
99 <212> TYPE: DNA
100 <213> ORGANISM: Hepatitis Type C Virus (HCV)
102 <220> FEATURE:
103 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Primer for Amplifying Fragments of HCV
104      cDNA
106 <400> SEQUENCE: 5
107 cccaagcttg gtgcacgggc tacgagacct                                30
109 <210> SEQ ID NO: 6
110 <211> LENGTH: 26
111 <212> TYPE: DNA
112 <213> ORGANISM: Hepatitis Type C Virus (HCV)
114 <220> FEATURE:
115 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Primer for Amplifying Fragments of HCV
116      cDNA
118 <400> SEQUENCE: 6

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119 cccaaagctta tcgatgacct taccca                26
121 <210> SEQ ID NO: 7
122 <211> LENGTH: 342
123 <212> TYPE: DNA
124 <213> ORGANISM: Mutated Hepatitis Type C1b Virus (HCV)
126 <220> FEATURE:
127 <221> NAME/KEY: 5'UTR
128 <222> LOCATION: (1)..(342)
130 <400> SEQUENCE: 7
131 gccagcccc tgatgggggc gacactccac catagatcac tccccgtga ggaactactg        60
132 tottcacgca gaaagcgtct agccatggcg ttagtatgag tgcgtgcag cctccaggcc        120
133 ccccccctccc gggagagcca tagtggctcg cggaaaccgt gagtacaccy gaattgccag        180
134 gacgaccggg tcctttcttg gatcaatccc gctcaatgcc tggagatttg ggcgtgcccc        240
135 cgcgagactg ctgcccaggt agtgttgggt cgcgaaagyc cttgtgggtac tgcctgatat        300
136 ggtgcttcg agtgccccgg gaggctcctg agaccgtgca cc                        342
138 <210> SEQ ID NO: 8
139 <211> LENGTH: 29
140 <212> TYPE: DNA
141 <213> ORGANISM: Hepatitis Type C1b Virus (HCV)
143 <220> FEATURE:
144 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Sense Primer for Amplifying Mutated
145     Fragments of HCV1b cDNA
147 <400> SEQUENCE: 8
148 cccaaagcttg ccagccccct gatggggggc                29
150 <210> SEQ ID NO: 9
151 <211> LENGTH: 20
152 <212> TYPE: DNA
153 <213> ORGANISM: Hepatitis Type C1b Virus (HCV)
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Anti-sense Primer for Amplifying Mutated
157     Fragments of HCV1b cDNA
159 <400> SEQUENCE: 9
160 ggtgcacggg ctacgagacc                20
162 <210> SEQ ID NO: 10
163 <211> LENGTH: 30
164 <212> TYPE: DNA
165 <213> ORGANISM: Renilla luciferase
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Sense Primer for Amplifying Renilla
169     luciferase gene
171 <400> SEQUENCE: 10
172 accgtgcacc atgacttcga aagtttatga                30
174 <210> SEQ ID NO: 11
175 <211> LENGTH: 30
176 <212> TYPE: DNA
177 <213> ORGANISM: Renilla luciferase
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Nucleotide Sequence of PCR Anti-sense Primer for Amplifying Renilla
181     luciferase gene

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183 <400> SEQUENCE: 11

184 ttggcgcgcc ttattgttca tttttgagaa

30

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/763,836

DATE: 03/07/2001

TIME: 13:11:13

Input Set : A:\37156SEQ.txt

Output Set: N:\CRF3\03072001\I763836.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date